CHAPTER SIX

WHY EMERGING BUSINESS MODELS AND NOT COPYRIGHT LAW ARE THE KEY TO MONETISING CONTENT ONLINE

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INTRODUCTION

The multimedia Internet is here to stay. Rich media – including videos, music, podcasts, and flash animation – is already a key feature of the Internet experience, and will only grow in diversity and importance. As Internet users increasingly crave – and technology increasingly enables – multimedia content delivered on demand over broadband connections, the number of songs, videos, and other media online will increase exponentially to feed the demand.

As online media consumption increases, so will expectations for its capacity to generate revenue for content owners and creators. Analysts boldly predict a bright future for the entertainment industries, especially in Asia, with broadband Internet cited as a key growth driver.[1] The main point of contention in the 2007 Hollywood writers' strike was compensation for media streamed or downloaded over the Internet.[2] Yet, to date, the vast majority of music and video acquired or consumed online is free and uncompensated. Despite the rising expectations for

[1] PricewaterhouseCoopers, *Global Entertainment and Media Outlook 2006-2010* (2006).

[2] Associated Press, '*A Look at Issues, Actions in the Hollywood Writers Strike*' (International Herald Tribune, 12 December 2007) <http://www.iht.com/articles/ap/2007/12/11/arts/Hollywood-Labor-FAQs.php> at 17 January 2008.

monetising content on the Web, no clear sustainable, scalable model for monetising content has emerged that compare to the level of revenues copyright owners have enjoyed in the "physical" (as opposed to online) market.

This chapter considers the primary strategies that the international music and film industries have employed to date, namely lawsuits and technological protections, and why these strategies have failed to produce a viable path to long-term revenue generation. I argue that content owners should not hold out hope that using law (in the form of copyright infringement lawsuits against individuals) or technology (in the form of digital rights management encryption software) will unlock the Web's potential for monetising their content. Instead, successful monetisation of content online will come through business models that can harness and monetise the current behaviour of Internet users. There are three emerging such models, each of which has significant potential and challenges: retail online content subscriptions, ad-supported content, and voluntary blanket licensing.

The following discussion is mostly broad, outlining circumstances facing copyright owners globally, and some emerging potential solutions. Nevertheless, I make a point throughout to highlight the situation in China in particular. Why? China is a challenging but dynamic Internet and digital media market, and is in fact the first market in the world where all three of the emerging models discussed in this chapter are actually being deployed in an effort to jumpstart the digital creative economy. China is an important market for the rest of the world to watch regarding emerging monetisation models.

Lastly this chapter is not meant to be a comprehensive overview of the many innovative ways that musicians, filmmakers, and other creators and companies are using the Web to make money from their content. Undoubtedly the Web has empowered many small and medium-sized content owners to distribute their works and connect with their fans in exciting and unprecedented ways. The purpose of this chapter is to explore the Web's potential for generating wide-scale, significant, and sustainable content revenues for the entertainment industry, including minor and major content owners.

COPYRIGHT PROTECTION ON THE WEB

Copyright law has, by and large, failed to protect the rights of content owners and prevent unauthorised sharing and consumption of their works online. More importantly, copyright law has provided most owners of media content with no clearly scalable and sustainable mechanism for commercialising their works in an age increasingly dominated by digital distribution over the Internet.

Copyright law worked relatively well in an era in which consumers were primarily able to access copyrighted works on physical media like records, CDs, audiocassettes, videocassettes, DVDs, and paper books. The law worked because it erected legal barriers to access that were largely supported by limitations of the physical world. It was well beyond the means of the average person to produce and distribute perfect copies of LP records or books, for example. One could make imperfect copies – dubbing the LP onto a cassette tape or photocopying the book – but such measures were time consuming and expensive to do on any mass scale. So, physical limitations kept casual unauthorised copying to an acceptable level, and copyright owners could concentrate the bulk of their enforcement efforts on larger-scale commercial piracy operations.

Three technologies emerged to change that copyright ecosystem forever: optical disc media like CDs and DVDs, the personal computer, and the Internet. Optical disc media provide perfect digital source files to be read and cloned by PCs, and the Internet provides a means of accessing and distributing unlimited perfect copies of those files to anyone else with a PC and internet connection, at virtually no cost to the user. Users began to devise systems by which millions of users could network together to locate and share each others' files. The negative impact of these massive peer-to-peer (P2P) file sharing networks on the fortunes of the recording industry was seemingly immediate.

There has been debate about whether file sharing on the Internet has hurt sales of recorded music, and some researchers conclude that P2P file sharing has had no discernible negative impact on CD sales.[3]

[3] Birgitte Andersen and Marion Frenz, '*The Impact of Music Downloads and P2P File-Sharing on the Purchase of Music: A Study for Industry Canada*' (2007) <http://www.ic.gc.ca/epic/site/ippd-dppi.nsf/en/h_ip01456e.html> at 17 January 2008;

Moreover, a convergence of diverse factors is likely to blame for the decline in music CD sales. That decline, however, has been so precipitous, and so neatly coincided with the advent of online file sharing, that it is difficult to imagine the easy availability of millions of free music files online has not impacted the market for CDs. In any case, the recording industry is in trouble and desperately needs to find a way to monetise music consumption online, regardless of whatever impact it has had on CD sales.

The film and television industry bought itself some breathing room due to physical limitations: digital video files are more complex and therefore contain far more data than digital audio files, so video files take longer to copy and distribute online, and take up more space on a user's PC hard drive. That grace period, however, is quickly coming to a close as bigger, cheaper hard drives find their way into users' computers, broadband speeds increase, and technologies like BitTorrent, a P2P downloading technology especially adept at downloading large files quickly, make file size a far smaller barrier.

Copyright enforcement has traditionally been challenging in China, with a developing legal system and a history of porous copyright enforcement leading to estimated CD and DVD piracy rates that at around 90% are among the highest in the world.[4] But even the commercial pirates are feeling the squeeze caused by the open and ubiquitous free file sharing on the Chinese Internet. As the Internet booms in China – driven in part by the wealth of easily accessible free content online – people have increasingly little need to purchase movies from pirates or legitimate providers alike.

Widespread free online content is not just a Chinese phenomenon, to be sure; it exists everywhere today. But perhaps nowhere is the problem as out in the open as it is in China. The Chinese search engines and P2P networks that enable much of the unauthorised file sharing in China operate in broad daylight, some making a healthy living selling online ads

Felix Oberholzer and Koleman Strumpf, 'The Effect of File Sharing on Record Sales: An Empirical Analysis' (2004) <http://www.gsb.stanford.edu/facseminars/pdfs/2006_10-05_Oberholzer-Gee.pdf> at 17 January 2008.

[4] For a discussion of piracy in China in the Internet age, see generally Eric Priest, 'The Future of Music and Film Piracy in China' (2006) 21 *Berkeley Tech Journal* 795.

to place in front of their millions of users. The ability to capture so many users with free content has helped many of these services attract capital investment from the most reputable Asian and American firms, or even to publicly list in the US.

Once the major copyright owners realised the size of the "tsunami" (as one major record label executive described it to me) that hit them when online file sharing went mainstream around the world, they sought to address file sharing using law as a first line of defence. The natural target of legal attacks were those, like Napster, who controlled the file sharing networks. Copyright owners were successful in shutting down Napster, a file sharing network with a centrally controlled file index. So, users quickly responded by developing P2P networks with no centralised index or mechanism for tracking and serving files. Copyright owners then aimed their legal crosshairs at individual users, initiating a sustained effort to file lawsuits against thousands of users in the US and UK, and sending thousands of warning letters to US universities requesting that they take action against students participating in illegal file sharing. The threats have had some effect on users' behaviour, but online file sharing remains robust, CD sales continue to drop, and one may question whether any reduction in file sharing achieved through suing individuals was offset by the ill will the lawsuits created. After all, it may be the first time in which an industry has sued tens of thousands of its own customers.

Both domestic and international entertainment companies have tried the litigation path in China with little success. Major Chinese search engines like Baidu.com and Yahoo.cn have deep pockets and are far and away the most popular channel for accessing free music files online in China, so they were natural targets for contributory infringement suits. But murky legal issues (Baidu won on appeal because the court found it only aggregated links to content but did not in fact serve the content itself,[5] while Yahoo.cn was found liable for infringement under similar circumstances[6]) and notoriously low damages for infringement available

[5] *'Music Labels Lose MP3 Search Case',* BBC News (19 November 2006), <http://news.bbc.co.uk/2/hi/entertainment/6163352.stm> at 17 January 2008.

[6] Reuters, '*Beijing Court Rules Yahoo China Violates IPR'*, (21 December 2007) <http://www.reuters.com/article/musicNews/idUSSHA9621520071221> at 17 January 2008.

under Chinese law[7] have left copyright owners with little recourse, and emboldened internet companies to continue to conspicuously serve up free, unlicensed content.

China's Internet gold rush is in full swing, and many companies believe that content is the best way to quickly attract page views (or "eyeballs") – one of the primary determinants of an internet company's value since more eyeballs presumably attract more advertising dollars. In the cutthroat Chinese Internet industry, most companies that wish to provide free content lack the considerable time, expertise, and financial and human capital required to seek proper licenses from myriad copyright owners. The few Chinese Internet companies for whom the provision of licensed content is a key aspect of their business model are at a significant disadvantage vis-à-vis their competitors who are not slowed by the need to negotiate a license before posting the latest movies, television series, and hit music, and who do not share their revenues with content owners.

Copyright law has had some impact on Chinese Internet companies, however. As these companies mature and seek to grow their businesses and reputations beyond China's borders, they feel compelled to play more by international rules. Baidu, for example, became the most successful Chinese Internet company largely by providing an MP3 search function that scans the Web, including blogs, online bulletin board systems, and other websites for free audio files, and provides users with a direct link to relevant files in its search results. Privately, Baidu officials have told me that MP3 searches account for 25 percent of Baidu's 100 million search requests per day (though many analysts believe MP3 searches actually account for a much higher percentage of Baidu's traffic).

While Baidu has made a good living providing Chinese netizens with links to free music, it nevertheless seeks to ally itself with copyright

[7] Eric Priest, 'The Future of Music and Film Piracy in China', (2006) 21 *Berkeley Tech Journal* 826; See also, Reuters, '*Beijing Court Rules Yahoo China Violates IPR'* (21 December 2007) (reporting that the appeals court in the Yahoo China infringement case ordered a fine of 200,000 yuan, or about US$27 000) <http://www.reuters.com/article/musicNews/idUSSHA9621520071221> at 17 January 2008.

owners. In 2006 and 2007, for example, the company announced a series of high-profile partnerships and licensing deals with content owners including EMI Records, MTV/Viacom, and Rock Records (a large Taiwanese independent record label). [8] The newfound interest in partnering with and paying copyright owners is not due to fear of copyright liability – the low damages typically awarded in Chinese copyright cases are easily within the cost of doing business for a company like Baidu, and in any event Baidu maintains it is not committing copyright infringement – a position with which at least one Chinese court has agreed. Rather, the company has international, even global aspirations (for example, it is a US-listed company, and in 2007 launched a Japanese version of its search engine), and seeks to improve its image as a global corporate citizen after suffering a barrage of lawsuits. Other Chinese Internet companies now find that giving their users easy access to free, unlicensed content is a quick shortcut to millions of eyeballs, but scalability beyond that point is a challenge when one's company and business model are dogged by serious legal questions.

The copyright industries have long dreamed that the rights and protections afforded by copyright law could be effectively replicated in software and other technologies designed to restrict consumers' access to copyrighted works. Somewhat euphemistically called "Digital Rights Management" (or "DRM"), in practice these technologies have proved largely incapable of preventing widespread copying and sharing of copyrighted works online. Restrictive DRM schemes have, however, proven rather effective at alienating paying customers and driving them to seek unrestricted files through alternative sources online, primarily through P2P file sharing networks.

[8] Music Week, '*EMI Partners with China's Largest Search Engine*' (16 January 2007), <http://www.musicweek.com/story.asp?storyCode=25089&sectioncode=1> at 18 January 2008; See also Steve McClure, 'Baidu, Rock Records Team Up for Chinese Music Service', *Billboard*, July 5, 2007, <http://www.billboard.biz/bbbiz/content_display/industry/e3i5dfb3f63da5f9979a7e8662e8966e637> at 17 January 2008; See also 'MTV, Baidu Launch Stunning Alliance', *China.org.cn*, 18 October 2006, <http://www.china.org.cn/english/2006/Oct/184736.htm> at 17 January 2008.

DRM schemes range from crude, unilateral restrictions (for example, embedding code on a CD that makes it unreadable by a personal computer) to more sophisticated and nuanced controls (such as Apple iTune's "Fairplay" DRM, which locks a purchased music or video file to a limited number of devices registered to a single user, and permits certain "fair uses" of the copyrighted works contained in those files, such as copying them to a limited number of recordable audio CDs).[9] All forms of DRM, however, restrict usage in some way, resulting in some degree of inconvenience to the user, which reduces the value to most users of the purchased audiovisual product.

There are two particularly serious obstacles to the success of DRM. The first is a typical lack of interoperability among devices. For example, Apple's market-dominating iPod portable digital music player only supports Apple's own DRM technology, and will not play DRM-encoded files purchased from Microsoft, Yahoo, Real, or any other online music retailer. Likewise, files bought from Apple's market-leading iTunes Music Store are incompatible with any computers or portable devices except those that are either manufactured by Apple or running Apple's software.

The second obstacle is leakage. Despite the efforts of talented engineers and the millions of dollars of investment poured into DRM schemes by entertainment companies, no DRM has proved hack-proof. And once a DRM scheme has been hacked, the content it was meant to protect can be freely copied and distributed. Because of the nature of digital media, it takes only a single copy to seed an infinite number of perfect copies. So once a DRM scheme has been defeated on a single copy of a song or video, that song or video can and often does quickly leak onto public file-sharing networks where it immediately proliferates and is readily available to all. The best any DRM scheme has been able to hope for is to provide a "speedbump" to average users, who would prefer to pay for a legitimate copy of the file (which is guaranteed quality and can be downloaded immediately through digital distributors such as the iTunes Music Store or Real Networks' Rhapsody service) rather than go to

[9] 'How Fairplay Works: Apple's iTunes DRM Dillemma', *RoughlyDrafted* 26 Febuary 2007, <http://www.roughlydrafted.com/RD/RDM.Tech.Q1.07/2A351C60-A4E5-4764-A083-FF8610E66A46.html> at 17 January 2008.

whatever trouble might be associated with obtaining an unauthorised copy.[10]

The recording industry has been at the front lines of the DRM issue longer than the film industry, largely due to music's popularity as an entertainment form, its abundance in digital form on CDs, the ease with which music can be "ripped" from CDs to PCs (since CDs traditionally incorporate no DRM), and the comparatively small sizes of compressed audio files versus the considerably larger size of most video files. While the major record labels (which at the time of this writing have been reduced through industry consolidation to four: Universal Music, SonyBMG Music, EMI, and Warner Music) were unified in their strong support for DRM as the best strategy for combating rapidly increasing losses to online file sharing, the myriad problems associated with DRM left many others in the industry unconvinced that DRM is a saviour.[11] Many indie labels decided that selling their music for download without DRM would serve the double purpose of making their songs compatible with the widest variety of devices possible and making them freely copiable, which would help to promote the artists on their roster.

By 2007, the situation grew so dire for the global recording industry that it was clear to many there was no time to wait out the DRM experiment. Steep year-over-year losses from ever-weakening CD sales, and the increasingly apparent inability of digital sales revenue to supplant those losses, meant a drastic shift in strategy was required. In February 2007, EMI was the first major label to announce that it would begin selling

[10] Charles Nesson, a proponent of the speedbumps approach, expressed his views in research on new digital media models at Harvard's Berkman Center for Internet & Society: "[The commercial success of online media services] does not depend on complete elimination of piracy or file-sharing. Instead, it depends on the comparative attractiveness of a service over file-sharing networks as a source for obtaining new releases of copyrighted works… The Speedbumps scenario seeks to craft a realistic and lawful approach that supports a viable commercial marketplace for digital entertainment products while also encouraging liberal reform of past practices in the entertainment industries, respecting the open end-to-end architecture of the internet, and retaining the basic structure of copyright law." Berkman Center for Internet & Society Digital Media Project, *'Speedbumps Scenario for Digital Media'* (2004), <http://cyber.law.harvard.edu/media/scenario2> at 25 September 2007.

[11] Nate Anderson, 'Making Money Selling Music Without DRM: the Rise of eMusic' *Ars Technica*, 22 May 2006 <http://arstechnica.com/articles/culture/emusic.ars> at 17 January 2008.

DRM-free music online.[12] Shortly thereafter, major online retailer Amazon.com dealt what many believe will prove to the final blow to DRM by announcing a new music download service that would only sell DRM-free music. Universal, the largest of the four major record companies, became the second major label to release music online without DRM.[13]

While the DRM debate rages in the West, it has had little impact in China. The topic seems quaint in an economic environment in which there has never been a sustainable model or market for retail or subscription music or video downloads. Some legitimate music download services, such as China's largest legitimate download retailer 9Sky, ostensibly use DRM to satisfy major labels' requirements. Some users report, however, that even those services actually do not use DRM, because in an environment saturated with free content, imposing restrictions and complicated usage rules on content downloads is plainly disadvantageous. Because it rarely touches their lives, DRM is simply not a part of the online consumer consciousness in China in the way that it is in the West.[14]

At this time, the lawsuit path and the DRM path both offer the entertainment industries in the West little hope of resurrecting traditional entertainment business models and revenues. In China, the notion that either of these strategies could help drive a turnaround in the difficult market for legitimate content is simply a non-starter.

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[12] EMI, 'EMI Music Launches DRM-Free Superior Sound Quality Downloads Across Its Entire Digital Repertoire', *EMI Press Releases*, 2 April 2007, <http://www.emigroup.com/Press/2007/press18.htm> at 17 January 2008.

[13] Ken Fisher, 'Music DRM in Critical Condition: Universal Tests DRM Free Music Sales', *Ars Technica*, 9 August 2007, <http://arstechnica.com/news.ars/post/20070809-music-drm-in-critical-condition-universal-tests-drm-free-music-sales.html> at 17 January 2008.

[14] Wolf Richter, *Key Findings from Digital Media Survey China 2007* at 7 (2007), draft manuscript on file with author (reporting that 82 percent of Chinese university student survey respondents were either unconcerned or neutral about getting files without copy protection or other use restrictions).

EMERGING ALTERNATIVES

What new business models are emerging globally and in China to help blaze an effective path to online monetisation in the face of near-ubiquitous free content online? The following discussion examines three emerging models: (1) the subscription model; (2) the ad-supported model, and (3) the blanket licensing model.

Each of these models seeks to take advantage of Internet features that make it a particularly efficient distribution platform. First, all three are based on the Internet's ability to deliver content instantly on demand. Second, they can harness the Internet's ability to facilitate automated tracking of content consumption, and use that data to determine copyright royalty distributions to content owners. Third, they leverage the Internet's ability to enable distribution of smaller payments across huge numbers of users in the hope of enabling a large aggregate payout to copyright owners. In short, each of these models embraces the Internet's openness and economies of scale, while previous strategies of the major copyright industries (lawsuits and DRM) have not. And despite challenges that these models face, they have significant potential because of their focus on monetising current Internet user behaviour rather than attempting to restrict and change it.

Before moving into the following discussion, it is worth pausing to ask: what about retail download services? After all, Apple's iTunes Music Store is the most successful online music and video store in the world, boasting over 3 billion song downloads at 99 cents each since it opened its virtual doors in 2003.[15] Amazon, the biggest online retailer in the world, launched a much-hyped DRM-free music download service in 2007.[16] It seems as the incumbents, the pay-per-download retail services have a clear edge over any emerging alternatives. Shouldn't retail download be discussed as a key emerging model for monetising content? Probably not.

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[15] Tunes Store Tops Three Billion Songs', *Apple Press Release*, 31 July 2007 <http://www.apple.com/pr/library/2007/07/31itunes.html> at 17 January 2008.

[16] Joshua Topolsky, 'Amazon Launches DRM-Free "Amazon MP3" Music Downloads', *ENGADGET*, 25 September 2007 <http://www.engadget.com/2007/09/25/amazon-launches-drm-free-amazon-mp3-music-downloads/> at 17 January 2008.

The success of the iTunes store seems to be the exception that proves the rule. No other retail download service in the world has come close to the volume of sales iTunes has mustered. Apple owns three-quarters of the legitimate music download market, while the next closest competitor has a single-digit market share. [17] Apple's continued unchallenged dominance in this area suggests that the iTunes store's tight integration with it's market-dominating iPod music player is an especially unique and compelling combination that other services cannot duplicate; but it also suggests that in general consumer apathy toward retail downloads is high. This seems particularly true when comparing the number of legitimate downloads from iTunes over four years from 2003–2007 (over 3 billion) to the number of files downloaded through P2P networks during the same period (estimated at 1 billion per month).[18]

The Retail Subscription Model

Some observers believe the music industry is undergoing a fundamental transition from a product-based industry to a service industry.[19] Before the technology existed to record music and sell it as a physical product, the music business was necessarily a service industry: those in the music profession made their living performing, teaching, or writing commissioned compositions. Since the advent of recorded music, however, selling music as a physical product became the lifeblood of the industry. Now that digital technologies have allowed freely available recorded music to become ubiquitous, thereby gutting the value of recorded music to a growing number of consumers, some ponder whether the industry will be forced to return to a model in which services comprise its primary revenue stream.

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[17] In the US, the world's largest online music market, Apple enjoys more than 70 percent of the legal download market. Emusic is a distant second at around 9 percent. See, eg, Devin Leonard, 'Rockin' Along in the Shadow of iTunes', *Fortune*, 13 February 2007, <http://money.cnn.com/magazines/fortune/fortune_archive/2007/02/19/8400178/index.htm> at 17 January 2008.

[18] David Kravets, 'Piracy Milestones Converge, Illegal Downloading Goes Unabated', *WIRED BLOG*, 4 September 2007 <http://blog.wired.com/27bstroke6/2007/09/piracy-mileston.html> at 17 January 2008 (citing data from network traffic research firm BigChampagne).

[19] David Kusek and Gerd Leonhard, 'The Future of Music: Manifestos for the Digital Music Revolution' (2005) 12-15.

In an environment where content has little value because it is freely obtained, but where unlicensed P2P services cannot directly "touch" the content they deliver for fear of contributory copyright liability, value-added services may become the thing users are most willing to pay for. It is plausible, therefore, that all the content industries, not just music, are headed in the direction of the service-based model for monetising content in the digital age. Services for which consumers are willing to pay a premium might include recommendation technologies to help people discover new content of interest, social networking features integrated with the content, central online hosting and storage of content for ubiquitous access via any Internet-connected device, convenient content searching and file access, faster download speeds, reliable virus-and-malware-free files, and provision of reviews, information, and lyrics or screenplays to accompany the music or video content.

A services-oriented model might suggest a shift toward a subscription paradigm for online content, in which users pay a recurring fee not to own the content, but to access it on demand together with core value-added services. In the music context, industry veterans Rick Rubin and David Geffen sketch a subscription model they believe will save the industry:

> "You would subscribe to music," Rubin explained…. "You'd pay, say, $19.95 a month, and the music will come anywhere you'd like. In this new world, there will be a virtual library that will be accessible from your car, from your cellphone, from your computer, from your television. Anywhere. The iPod will be obsolete, but there would be a Walkman-like device you could plug into speakers at home. You'll say, 'Today I want to listen to ... Simon and Garfunkel,' and there they are. The service can have demos, bootlegs, concerts, whatever context the artist wants to put out. And once that model is put into place, the industry will grow 10 times the size it is now."
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> [According to Geffen,] "The subscription model is the only way to save the music business. If music is easily available at a price of five or six dollars a month, then nobody will steal it."[20]

[20] Lynn Hirschberg, 'The Music Man', *NY Times Magazine*, 2 September 2007, <http://www.nytimes.com/2007/09/02/magazine/02rubin.t.html> at 17 January 2008.

Rubin and Geffen are describing a music service, but the subscription model they advocate is applicable to movies, short-form video, and other types of digital media as well.

"Churn" is a key weakness of the retail subscription model Rubin and Geffen envision. What's to stop me from signing up for the service for a month or two, downloading all the content I am interested in, and then cancelling my subscription? I can expand my album collection tenfold for a few dollars, with ease, speed and a user experience that greatly transcends what I can get from unlicensed file sharing networks. And once a year I can repeat my strategy to top up on the latest content. If a large enough percentage of users do the same, and enough new users haven't subscribed to offset the cancellations plus lead to sustainable growth, then the model breaks down.

Early entrants into the retail subscription space usually attempt to combat churn by providing high-quality services and a large pool of content in a "rental" model, using a DRM strategy that disables any content a subscriber has downloaded once the DRM software detects that the user has stopped paying the monthly subscription fee. For many consumers, however, a DRM-enforced rental model leaves much to be desired in terms of convenience and compatibility with popular media devices such as the iPod. In addition, many users prefer to own their content outright, especially music.

After several years in the market, a handful of music rental services are beginning to gain traction with consumers in North America. Rhapsody, owned by Real Networks, is the DRM-based subscription service that has fared the best. Rhapsody charges customers $12.99 per month for unlimited access to music, and $.99 per song for à la carte music downloads. Real claims approximately 2.7 million users for all its music services, though it is unclear what percentage of those are Rhapsody subscribers at the $12.99 rate.[21]

[21] 'Rhapsody Teams with Universal Music Group for DRM-Free Music Test', *Real Networks Press Release,* 10 August 2007, <http://www.realnetworks.com/company/press/releases/2007/rhap_umg.html> at 17 January 2008. ("RealNetworks … currently leads the market for music subscription services with more than 2.7 million subscribers to Rhapsody and its other premium music services.").

At least one music service, US-based eMusic, provides DRM-free subscriptions, that is, "all-you-can-eat" downloads of unencrypted music files for a fixed monthly fee (though the number of downloads permitted each month is capped).[22] After a decade in the market, eMusic boasts about 300,000 subscribers, with a nearly 20 percent increase in subscribers in 2007.[23] Still, for the music industry, the subscriber levels are discouragingly low. With so much free content now available on the Web, and so many more options vying for consumers' entertainment dollar today than twenty-five years ago, it seems unlikely retail content subscription services will have more than niche appeal. Retail models – including subscription services – thrive on scarcity, thereby encouraging users to pay higher prices for access. But scarcity simply does not apply well to the Internet.

Retail subscription services, like retail download services, have gained little traction in China. At least two local companies have launched music subscription services: 9sky.com, which provides "all-you-can-eat" music download services from a large catalogue of content for about US$3 per month, and Top100.cn, which launched its service in 2006. Neither has been successful with the model, and both are now shifting to other models in an attempt to monetise content more effectively (9sky plans to bundle music with proprietary personal media devices,[24] while Top100.cn was purchased by Google in 2007 and plans to provide ad-supported music download services).

The Ad-supported Model

Recent nosebleed valuations of Internet media companies such as YouTube – which Google acquired in 2006 for US$1.65 billion – have driven entrepreneurs in droves to produce websites and social networking applications that serve up free content to users, whether or not valid licenses for the content have been obtained. In the current "Web 2.0" phase, eyeballs are the most valuable currency for Internet

[22] See further www.emusic.com.

[23] 'eMusic Momentum Continues; Tops 300,000 Subscribers' *eMusic Press Release*, 17 Apr. 2007, <http://www.emusic.com/about/pr/pr2007417.html> at 17 January 2008.

[24] See further <http://www.trb.cn/wordpress/index.php/2007/12/20/527/> at 17 January 2008.

companies. Sites attracting the most eyeballs are the most valuable sites on the Web regardless of whether they make a profit (and many do not).[25] Giving away content for free is an effective way to attract a large number of eyeballs.

The assumption underlying the sky-high valuations of new media websites is that those with high traffic volumes will figure out some way to profit from that traffic in the future, even if they have negative cash flows today. Most look to Internet advertising revenue as the default strategy for monetising the traffic. Giving content away and monetising it through ad revenue – similar to the network television model – is a path to monetisation that is certainly compatible with most consumers' expectations about Internet content: that it is free.

Still, there are major questions concerning the online advertising model. Most importantly, will there ever be enough Internet ad revenue to sustain a legion of Web 2.0 businesses, social networking sites, "widgets" embedded in those social networking sites, search engines, newspapers, portals, gaming sites, and blogs, in addition to helping support healthy content industries that produce high quality, high-production-value works?

Online ad spending is increasing, to be sure, growing at an expected rate of over 21 percent each year through 2011.[26] Analysts believe the global market for online spending will increase from US$36 billion in 2007 to US$61 billion in 2010, overtaking global radio and magazine ad spending during that period.[27] Rich Internet media, including music and video, is helping to drive growth in online advertising, and content owners who license their works online will no doubt benefit from the flow of ad revenue.

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[25] Dan Tynan, 'VCs Tell Startups: Don't Show me the Money (Yet)', *WIRED*, Dec. 4, 2007, <http://www.wired.com/techbiz/startups/news/2007/12/monetize> at 17 January 2008. ("'Numbers clearly matter [to a start-up's overall value]," says [the CEO of a Web 2.0 site]. 'But the numbers that matter most are not the ones with dollar figures attached, they're the ones that measure page views and site engagement.'")

[26] Veronis Suhler Stevenson, 'VSS Communications Industry Forecast 2007-2011' (2007), <http://www.vss.com/industry_research/publications/communications_industry_forecast/index.asp> at 17 January 2008.

[27] 'Global Ad Market to Accelerate in 2008 Despite Credit Squeeze', *ZenithOptimedia Press Release*, 3 December 2007.

It is unclear, however, what percentage of this revenue will find its way to content owners versus all the many other online industries that rely primarily or solely on ad revenue. The majority of ad revenue remains locked up in a handful of sites, with more than 90 percent of total online ad revenue in the US going to the top fifty websites, and 70 percent going to the top ten sites.[28] As content consumption moves increasingly online, will content owners be able to snatch away a large enough piece of the advertising pie from top web companies to be sustainable?

According to one media and investment executive, projected ad revenue will not be enough to sustain the myriad of new Internet and media-related businesses.

> "I'm getting to the point where I feel like every answer to every business development pitch is 'We're going to be advertiser supported,'" said Beth Comstock, president of Integrated Media at NBC Universal, which this year set up a fund to invest in media and digital companies. "It's just not going to be possible," she said at a recent advertising conference. "There are not going to be enough advertising dollars in the marketplace. No matter how clever we are, no matter what the format is."[29]

Moreover, it is unclear how to most effectively combine advertising with online content. In traditional ad-based media such as television or radio, content was performed for the viewer or listener with advertisements interspersed. Internet users have far more control over their content experience than previous generations of consumers. Internet users can download and store music and video for playback when they want on whatever device they choose. A site may require a user to view a banner ad before or while downloading the content, but this method of advertising fails to maximise the content's economic value because the user only views the banner ad once, but may enjoy the download thousands of times in ensuing years. Ways to address this problem include embedding ads in the content itself, or requiring the viewer to experience the content in a DRM-controlled environment on the user's

[28] Paul Thomasch, 'Ad Dollars Flood Web, but Will They Go Far Enough?', Reuters, 12 October 2007, <http://www.reuters.com/article/internetNews/idUSN1221764120071012?pageNumber=1> at 17 January 2008.
[29] Ibid.

PC that displays ads while playing the content. But users may be annoyed by the embedded ads or restrictions on how the content can be enjoyed, which may cause them to quickly reject the "legal" content when myriad "illegal" sources of the same content are readily available.

It is also worth noting that many traditional media outlets for some time have not relied solely on advertising income. Newspapers and even cable television stations have generally relied on a combination of subscription revenue and advertising income to support their businesses.

Nevertheless, the ad-supported online media experiment has begun. One new online music destination, SpiralFrog, in 2007 began serving free downloads of DRM-encrypted music files, including major record label content, in exchange for users visiting the site and viewing advertisements at least once a month.[30] Another service, We7, allows users to download free, DRM-free music, though the music files contain a short pre-roll advertisement at the beginning of the song.[31] Video sites have also begun exploring advertising solutions, most notably YouTube, which provides free video streaming and in 2007 began experimenting with inline ads at the bottom of some videos.[32] And "viral" video site Revver embeds ads in its free video files and shares ad revenue with content creators.[33]

China will prove an interesting test market for licensed, free online content. At the time of this writing rumours are flying that Google, in a bid to compete with Baidu for China search market dominance, plans to release a music portal from which users can search and download ad-supported, DRM-free content, including content from at least some of the major record labels. If true, Google's will be the first such service anywhere in the world to serve licensed, DRM-free major label content for free download. The experiment is especially interesting in China where, despite Internet growth that is unparalleled elsewhere in the world, the online ad market remains surprisingly soft. Estimates for 2007

[30] See further www.spiralfrog.com.
[31] See further www.we7.com.
[32] Catherine Holahan, 'Google's In-Video Ad Experiment', *Business Week*, May 24, 2007, <http://www.businessweek.com/technology/content/may2007/tc20070524_820093.htm> at 17 January 2008.
[33] See further www.revver.com.

online ad revenues range from US$850 million to US$1.3 billion, as compared with US$21 billion spent on online advertising in the US in 2007.[34]

The Voluntary Blanket Licensing Model

The voluntary blanket – or "collective" – licensing model seeks to create a healthier long-term ecosystem for content owners and Internet service providers ("ISPs") by utilising the ISP's billing relationship with the consumer and extracting economic value for online works at the service provider level.[35] One can argue, plausibly, that content is already monetised on the Internet, but not by content owners. ISPs earn billions of dollars in revenue from the provision of Internet access services, and content – much of which is unlicensed and unmonetised by content owners – accounts for a huge percentage of Internet traffic.[36] If unlicensed P2P traffic and the distribution of other unlicensed content consumes a significant percentage of the bandwidth that ISPs sell, it is reasonable to suggest the content being accessed via that bandwidth creates value for the consumer accessing, and the ISP selling, the bandwidth. The less content there is available on Web, the less valuable the Web is to consumers, and this fact should impact the price that the market will bear for Internet access services.

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[34] Thomas Crampton, '*Bill Bishop's Estimate of 2007 China Internet Advertising Revenue*', 28 October 2007 <http://www.thomascrampton.com/2007/10/28/bill-bishops-estimate-of-2007-china-internet-advertising-revenue/> at 17 January 2008. (Crampton writes on technology and media for the International Herald Tribune and the New York Times); See also eMarketer, '*Online Advertising on a Rocket Ride*', 7 November 2007, <http://www.emarketer.com/Article.aspx?id=1005549&src=article1_home> at 17 January 2008 (projecting $21.4 billion in online ad spending for the US market in 2007).

[35] The model outlined here is a private, non-compulsory variant on the government levy "alternative compensation system" model defined by William Fisher III and others, and a refinement of Fisher's "co-op" model. See William W Fisher III, 'Promises to Keep: technology, Law, and the Future of Entertainment' (2004). For a discussion of the alternative compensation model in China, See Eric Priest, 'The Future of Music and Film Piracy in China', (2006) 21 *Berkeley Tech. Journal* 305.

[36] Jason Kowal, 'The Never Ending Rush Hour: Internet Traffic Growth Requires Continual Investment in Capacity and Innovation in Network Management (9 August 2007) <http://www.newmillenniumresearch.org/archive/Rush_Hour_August2007.pdf> at 17 January 2008. (P2P applications occupied nearly 40 percent of U.S. broadband traffic in 2007).

It makes sense, then, for the customer and ISPs to pay a fee directly to content owners. If the fee is charged to all users and thereby distributed across a large number of individuals, the fee per individual can remain low while the total pool of revenue collected and distributed to copyright owners is high.

How would such a model work in practice? An entity such as a company or collective would administer blanket licenses to networks and operate the required technologies for counting content usage and distributing royalties to content owners. The company would aggregate licenses from owners of a wide variety of content including music, videos, documents, e-books –virtually anything that can be digitised, downloaded, and shared online. It would then distribute those works as digital file downloads or "streams" to ISPs and their users in return for per-subscriber monthly fees paid by participating ISPs on behalf of their users. The ISPs could choose to pass the fees through to the end users as a slight mark-up or pay the fees directly without passing them through to subscribers. Key to the model is the monetisation of content online without having to rely on a retail relationship with consumers, as retail content services have failed to generate sufficient uptake.

A central function of the company would be to collect data on end users' actual consumption of content (how frequently a given file was downloaded, played, burned to CD, copied to an external MP3 player, and so on). To do so, the company would operate a sophisticated content usage counting and accounting system, which importantly should include mechanisms to ensure the privacy of users' consumption data. The data would then be processed and used to determine a pro rata distribution to content owners of the pool of revenue collected from ISPs. Online advertising could provide a supplemental income stream and also be shared with content owners.

The primary benefit of the blanket licensing model is that it monetises the abundance of content on the Web, as well as users' online behaviour – downloading, consuming, and sharing content – rather than seeking to alter user behaviour to fit more outmoded scarcity-oriented retail models. Retail models for online content are generally not very consumer-friendly. Compared to the free content to which many consumers have easy access, retail is inconvenient (requiring the entry of payment information before consummating a transaction) and expensive

(iTunes in the U.S., for example, charges 99 cents per song, $1.99 per TV show, and more than ten dollars per movie). These barriers to entry make the retail model especially challenging in China, and make the blanket licensing model especially attractive in a market where users see value in "zhengban" (or, legitimate) content, but are loathe to pay more than "daoban" (or, pirate) prices. The economies of scale leveraged by the blanket licensing model can ensure copyright owners are well compensated for their works online, even if the fee collected per subscriber is low.

An ISP would participate in the blanket licensing model only if doing so makes good business sense. Fortunately, it can make good business sense for an ISP to pay a small content fee on behalf of each of its subscribers. ISPs naturally wish to sign up and keep new subscribers, and providing an "all-you-can-eat" licensed content download service can help with that objective. ISPs are also increasingly concerned about potential legal liability for large volumes of unlicensed content stored and transported on their networks.[37] Joining a blanket licensing program could help shield ISPs from legal liability, at least for the content covered by the blanket license. Further, blanket licensing can help ISPs save on bandwidth costs—an ever-important objective to ISPs.[38] Signing up with a blanket licensing provider would essentially "site-license" the network for a catalogue of content, which could then be stored, or "cached," legally throughout the ISP's own network infrastructure. This would allow the ISP to corral more traffic within the network (rather than flowing outside the network), which can reduce the network's bandwidth costs.

There are, no doubt, challenges facing the blanket licensing model.[39] First, as with the ad-supported model and the subscription model, it

[37] 'Record Companies Win Legal Copyright Case Against ISP' *IFPI Press Release*, 18 Dec. 2006, <http://www.ifpi.org/content/section_news/20061218.html> at 17 January 2008.

[38] Ramayya Krishnan et al., 'The Economics of Peer-to-Peer Networks', (2003) 5 Journal of Information Technology Theory and Application 31 (observing that P2P traffic often occupies a very large percentage of network bandwidth and can create large transit fees for ISPs that permit P2P traffic).

[39] For a more in-depth discussion of challenges related to alternative compensation models like the blanket licensing model, see William W Fisher III, 'Promises to Keep: technology, Law, and the Future of Entertainment' (2004); and Eric Priest, 'The Future of Music and Film Piracy in China', (2006) 21 *Berkeley Tech Journal* 305.

remains to be seen whether the blanket licensing model can in the long run generate enough per-user revenue to be the global answer to monetisation of the creative industries. Second, some may see inequities in the cross-subsidisation aspects inherent in the model. When, for example, an ISP chooses to pass the content fee along to subscribers, some will inevitably use the content more than others. (It is worth noting that such cross-subsidisation is typical in the Internet service context. For example, light bandwidth users generally pay the same Internet access fee as heavy bandwidth users, though light users are subsidising the high bandwidth costs of the heavy users. The cross-subsidy helps keep the fee reasonable for all users.)

Third, the blanket licensing model is the most untested of the three emerging models discussed in this chapter. More specifically, the ISP blanket licensing model has never been tested in the marketplace (though collective licensing for music publishers and composers has existed for over a century and provides the ISP blanket licensing model with a strong precedent). That the ISP blanket licensing model is untested is about to change, however. Since late 2005, I have been involved with a project, founded at Harvard Law School's Berkman Center for Internet & Society, to research and later develop a specific implementation of the blanket licensing model. The research was funded initially by the MacArthur Foundation, but it became clear that a real-world implementation of the model would require significant resources and private capital, so a private company was formed, of which I am presently an officer.

We selected China as our first market largely because stakeholders in China, particularly content owners and ISPs, saw the model as a compelling solution to a difficult online piracy problem. Chinese stakeholders were more open-minded and willing to embrace the model than their counterparts in the West, who at the time were concerned about the model's potential for disrupting the current entertainment industry structure. There were no such concerns in China, and that, coupled with the fact that China is the fastest growing Internet and entertainment market in the world, helped convince us China was the right opportunity. Importantly, one of our objectives was, together with our Chinese partners Tsinghua University and the China Education and Research Network (CERNET), to help China develop an innovative

solution to intellectual property challenges it faces, and in doing so help China emerge as a global leader in intellectual property protection in the Internet age.

CONCLUSION

The central theme of this chapter is not protection of copyright on the Internet – it is monetisation of copyrighted works on the Internet. The distinction is important because there was a time when copyright "protection" went hand-in-hand with "monetisation," but that is no longer the case. Internet users now control how music and video are acquired, shared, and consumed on the Web. For the most part, content is free from cost and restrictions. Strategies involving suing Internet users or protecting legitimately purchased digital files with DRM have not offered a path to monetisation in the face of near-ubiquitous free content online. Models that seek to "put the genie back in the bottle" and alter users' behaviour offer little hope to content owners of monetising their content online in a viable, sustainable way.

P2P services and other services that provide free streaming and downloading of content are popular for a reason: they are inexpensive and convenient, giving users the control to determine how and when they enjoy the content. Successful future models are those that can harness and monetise these features. The successful models will embrace users' current behaviour – downloading unlimited content that they can share and keep without restriction – and monetise it by adding value to all the stakeholders in the chain: ISPs, content owners, and consumers. Copyright law will continue to have a role on the Internet, but more as a facilitator of these new models (enabling attributions, royalty payments, and so on).

The ad-supported model and the blanket licensing model embrace the openness of the Internet, and have mechanisms for leveraging that openness into revenue streams for content owners, and therefore are more likely to succeed in the long run than retail models – including the retail subscription model – that rely on scarcity. Nevertheless, all three of these models will coexist for some time into the future, and will help enable the Internet to finally live up to its potential as the dominant media distribution platform.